

Application No. 10/531,502
Amendment dated September 5, 2007
Reply to Office Action dated March 8, 2007

REMARKS

Claims 8-19 are pending and have been added. Claims 1-7 have been cancelled. No claims have been allowed.

Applicants have canceled Claims 1-7 and have replaced same with new Claims 8-19 which conform to U.S. method claim practice. Responsive to the Examiner's objection regarding Claim 6, Applicants submit that same is obviated by the submission of new Claims 8-19.

The Examiner rejected prior Claims 1-7 under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 4,572,676 to Biermans et al. ("Biermans et al. '676") in view of U.S. Patent No. 4,519,717 to Jones et al. ("Jones et al. 717").

Biermans et al. '676 discloses a method and apparatus for determining the saturation temperature of a solution containing a dissolved substance. The apparatus, shown in Fig. 1, includes laser 10 which shines a laser beam through measurement vessel 2, prism 14, and polarization filter 12 for receipt by photodetector 13.

Jones et al. '717 discloses an apparatus and method for detecting an optical cloud point in a liquid hydrocarbon sample. The apparatus, shown in Fig. 3, includes a first polarizing lens 44 downstream of incandescent lamp 42 and upstream of a sample chamber 20, and a second polarizing lens 48 downstream of sample chamber 20 and upstream of photocell 50. First and second polarizing lenses 44 and 48 are oriented perpendicularly with respect to one another.

New Claim 8 calls for a method of analyzing a sample including providing an apparatus having, *inter alia*, a diaphragm mounted directly downstream of a laser emitter, the diaphragm reducing a cross section of an optical beam emitted by the laser emitter to prevent reflection of the optical beam on walls of a measuring cell; and a polarizer mounted upstream of a longitudinal receiver, the polarizer adjusted such that the optical beam emitted by the laser emitter cannot be transmitted therethrough.

Applicants respectfully submit that new independent Claim 8 is not obvious over Biermans et al. '676 in view of Jones et al. '717 because each of the foregoing references, either

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alone or in combination, fails to disclose each and every element called for in new independent Claim 8.

On pages 4 and 5 of the Office Action dated March 8, 2007, the Examiner acknowledged that "Biermans et al does not disclose a diaphragm that is mounted directly downstream of the laser emitter so that the optical beam emitted thereby is sufficiently fine to rule out any reflection on the walls of the measuring cell" but asserted that "Jones et al. discloses a cloud point analyzer in figure 3 comprising a diaphragm (44) that is mounted directly downstream of the laser emitter so that the optical beam emitted thereby is sufficiently fine to rule out any reflection on the walls of the measuring cell (column 3, lines 34-37)".

The Examiner appears to equate the polarizing lens 44 of Jones et al. '717 with the diaphragm called for in independent Claim 8. However, Applicants respectfully submit that the diaphragm called for in independent Claim 8 is not a polarizer but rather is a different component. For example, as discussed at page 6, lines 13-23 of the present specification, the diaphragm may be a component having an aperture for reducing the cross section of the laser beam passing therethrough. Thus, the diaphragm is mounted directly downstream of the laser emitter to restrict the amount of light passing therethrough such that the laser beam passing through the measurement cell is sufficiently fine to prevent reflection on the walls of the cell.

New dependent Claim 19 calls for the diaphragm to include an aperture having a diameter between 1 mm and 1.5 mm.

Applicants respectfully request the Examiner to note that, as shown in Fig. 1 of the present application and as now claimed in new dependent Claim 18, the present apparatus may optionally include both a polarizer and an auxiliary polarizer oriented perpendicularly to the polarizer, similar to the dual polarizer arrangement of Jones et al. '717.

Therefore, Applicants respectfully submit that new independent Claim 8, as well as Claim 9-19 which depend therefrom, are not obvious over Biermans et al. '676 in view of Jones et al. '717.

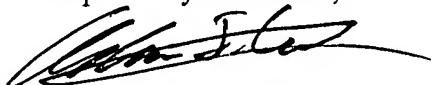
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It is believed that the above represents a complete response to the Official Action and reconsideration is requested. Specifically, Applicants respectfully submit that the application is in condition for allowance and respectfully request allowance thereof.

In the event Applicants have overlooked the need for an extension of time, payment of fee, or additional payment of fee, Applicants hereby petition therefore and authorize that any charges be made to Deposit Account No. 02-0385, Baker & Daniels LLP.

Should the Examiner have any questions regarding any of the above, the Examiner is respectfully requested to telephone the undersigned at 260-460-1695.

Respectfully submitted,



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